OPERATOR

Company: TDI, INC

1310 BISON ROAD Address: HAYS, KANSAS 67601

Kansas

Contact Geologist: TOM DENNING Contact Phone Nbr: 785-259-3141 Well Name: WILLIE #1

State:

NW SE SE SE Location: API: 15-051-26,287-00-00 **INFIELD** Pool: Field: REICHERT

Country:

USA



1310 BISON ROAD HAYS, KANSAS 67601 (785) 628-2593

Scale 1:240 Imperial

Well Name: WILLIE #1 NW SE SE SE Surface Location:

Bottom Location:

15-051-26,287-00-00

API: License Number: 4787

Spud Date: 5/4/2012 3:00 PM Time: Region: **ELLIS COUNTY** Drilling Completed: 5/10/2012 Time: 7:00 AM 500' FSL & 415' FEL

Surface Coordinates: **Bottom Hole Coordinates:**

Ground Elevation: 2033.00ft K.B. Elevation: 2043.00ft

2900.00ft Logged Interval: To: 3753.00ft

Total Depth: 3750.00ft Formation: LANSING-KANSAS CITY Drilling Fluid Type: Chemical/Fresh Water Gel

SURFACE CO-ORDINATES

Well Type: Vertical

Longitude:

N/S Co-ord: 500' FSL E/W Co-ord: 415' FEL

Latitude:

LOGGED BY



Company: **SOLUTIONS CONSULTING**

Address: 108 W 35TH HAYS, KS 67601

Phone Nbr: (785) 639-1337

Logged By: Geologist Name: HERB DEINES

CONTRACTOR

Contractor: SOUTHWIND DRILLING INC

Rig #:

Rig Type: **MUD ROTARY** Spud Date: 5/4/2012 Time: 3:00 PM 5/10/2012 TD Date: Time: 7:00 AM Rig Release: 5/11/2012 Time: 3:00 AM

ELEVATIONS

2043.00ft 2033.00ft K.B. Elevation: Ground Elevation:

K.B. to Ground: 10.00ft

NOTES

RECOMMENDATION TO RUN PRODUCTION CASING BASED ON FAVORABLE STRUCTURE AND POSITIVE RESULTS OF TWO DSTS.

FORMATION TOPS SUMMARY AND DAILY PROGRESS AND ACTIVITY SUMMARY

WILLIE #1 **NW SE SE SE**

Sec.9-15s-19w

2033' GL 2143' KB **FORMATION** SAMPLE TOP **LOG TOP Anhydrite** 1257+786 1258+785 **B-Anhydrite** 1293+750 1294+749 Topeka 3011- 968 3012-969 **Heebner Shale** 3289-1246 3289-1246 **Toronto** 3309-1266 3311-1268 LKC 3333-1290 3336-1293 **BKC** 3583-1540 3580-1537 Conglomerate 3626-1583 3618-1575

RTD 3750-1707

LTD 3753-1710

3660-1617

3738-1695

5-04-12 RU, Spud, set surface casing to 213.73' w/150 sxs. Common, 2%gel,

3%CC, Slope survey 0 degree, WOC 8 hrs. Plug down 9:00PM.

3663-1620

Not Called

5-05-12 350' drilling 5-06-12 1720' drilling

Arbuckle

Reagan Sand

5-07-12 2640' drilling, displaced mud system 2861'-2891'

5-08-12 3305' drilling, DST # 1 ("C" zone") 5-09-12 3498' drilling, DST #2 ("H", "I", "J")

5-10-12 3750' drilling, RTD 3750', short trip, logs, run 5 ½" production casing

5-11-12 3750' finish cementing top stage through DV, RD

DST #1 SUMMARY PAGE



DRILL STEM TEST REPORT

TDI Inc. 9 15s 19w Ellis

 1310 Bison Rd
 Willie # 1

 Hays Ks 67601
 Job Ticket: 45722
 DST#:1

 ATTN: Herb Deines
 Test Start: 2012.05.08 @ 15:00:00

GENERAL INFORMATION:

Formation: LKC "C"

Press@RunDepth:

Start Date:

Deviated: No Whipstock: 2043.00 ft (KB) Test Type:

 Time Tool Opened: 16:31:45
 Tester:
 Jim Svaty

 Time Test Ended: 20:40:00
 Unit No:
 41

Time Test Ended: 20:40:00 Unit

3350.00 ft (KB)

End Date:

 Interval:
 3349.00 ft (KB) To
 3370.00 ft (KB) (TVD)
 Reference Elevations:
 2043.00 ft (KB)
 ft (KB)

 Total Depth:
 3370.00 ft (KB) (TVD)
 2033.00 ft (CF)
 2033.00 ft (CF)

 Hole Diameter:
 7.88 inchesHole Condition:
 Fair
 KB to GR/CF:
 10.00 ft

Hole Diameter: 7.88 inchesHole Condition: Fair

Serial #: 6741 Inside

95.35 psig @

2012.05.08

Capacity: 8000.00 psig 2012.05.08 Last Calib.: 2012.05.08

Conventional Bottom Hole (Initial)

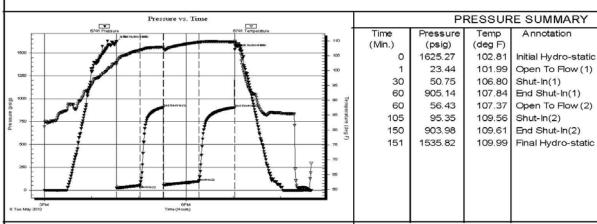
 Start Time:
 15:00:05
 End Time:
 20:39:09
 Time On Btm:
 2012.05.08 @ 16:31:40

 Time Off Btm:
 2012.05.08 @ 19:01:55

TEST COMMENT: 30-IFP- BOB in 4min 30-ISIP- Surface Blo

30-ISIP- Surface Blow Building to 3in 45-FFP- BOB in 1 1/4min

45-FFP- BOB in 1 1/4min 45-FSIP-Surface Blow Building to 7 1/2in in 30min

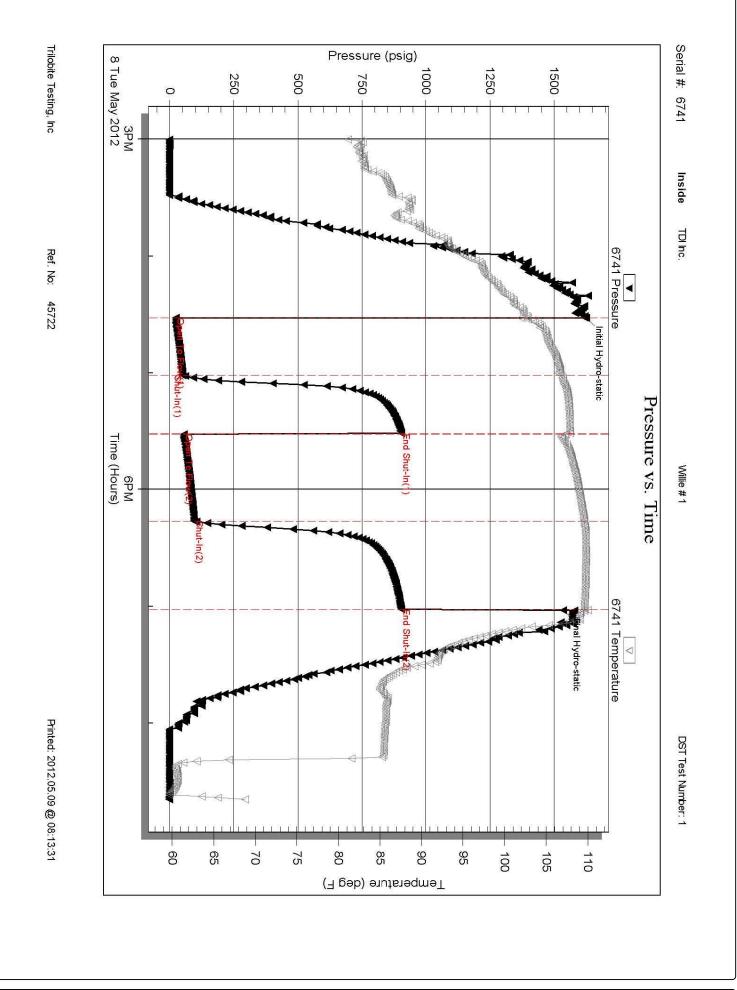


Recovery							
Length (ft)	Description	Volume (bbl)					
35.00	GO 55%g 45%o	0.21					
62.00	GMCO 25%g 5%m 70%o	0.87					
62.00	GMWC 30%g 2%m 18%w 50%o	0.87					
62.00	2.00 MOCW 5% m 10% o 85% w						
0.00	GIP 1575	0.00					

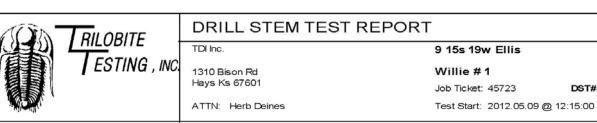
Gas Rates

Choke (inches) Pressure (psig) Gas Rate (Mct/d)

Trilobite Testing, Inc Ref. No: 45722 Printed: 2012.05.09 @ 08:13:30



DST # 2 SUMMARY PAGE



GENERAL INFORMATION:

LKC "HI&J" Formation: No Whipstock: 2043.00 ft (KB) Deviated:

Time Tool Opened: 13:48:25 Time Test Ended: 17:30:00

3535.00 ft (KB) (TVD) Hole Diameter: 7.88 inchesHole Condition: Fair

Interval: 3448.00 ft (KB) To 3535.00 ft (KB) (TVD) Total Depth:

Test Type: Conventional Bottom Hole (Reset) Tester: Jim Svaty

DST#: 2

Unit No: 41

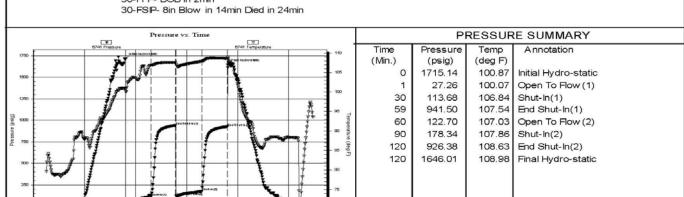
Reference Elevations: 2043.00 ft (KB) 2033.00 ft (CF) KB to GR/CF: 10.00 ft

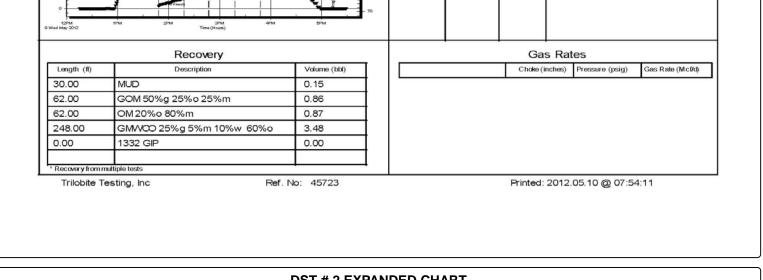
Serial #: 6741 Inside

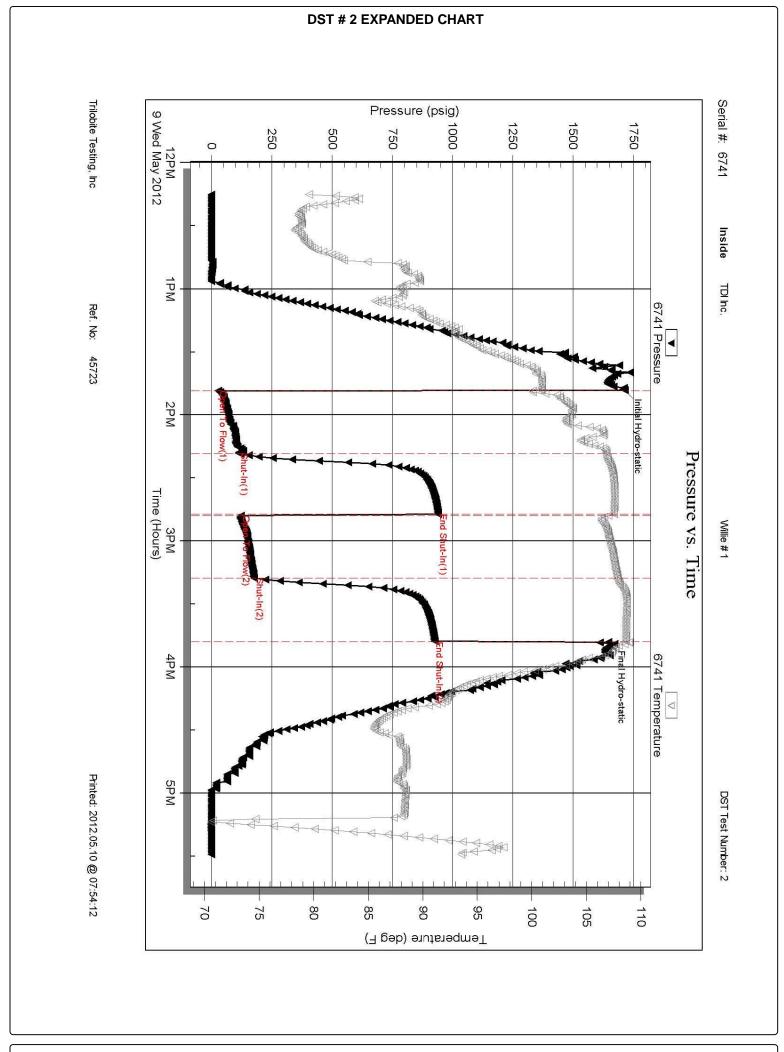
Press@RunDepth: 178.34 psig @ 3449.00 ft (KB) Capacity: 8000.00 psig 2012.05.09 Start Date: 2012.05.09 End Date: Last Calib.: 2012.05.09 17:29:29 2012.05.09 @ 13:48:20 Start Time: 12:15:05 End Time: Time On Btm: Time Off Btm: 2012.05.09 @ 15:48:20

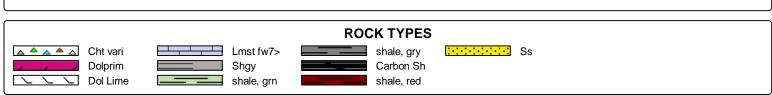
TEST COMMENT: 30-IFP- BOB in 5min

30-ISIP- 1 1/2in Blow in 5min Died in 12min 30-FFP- BOB in 2min





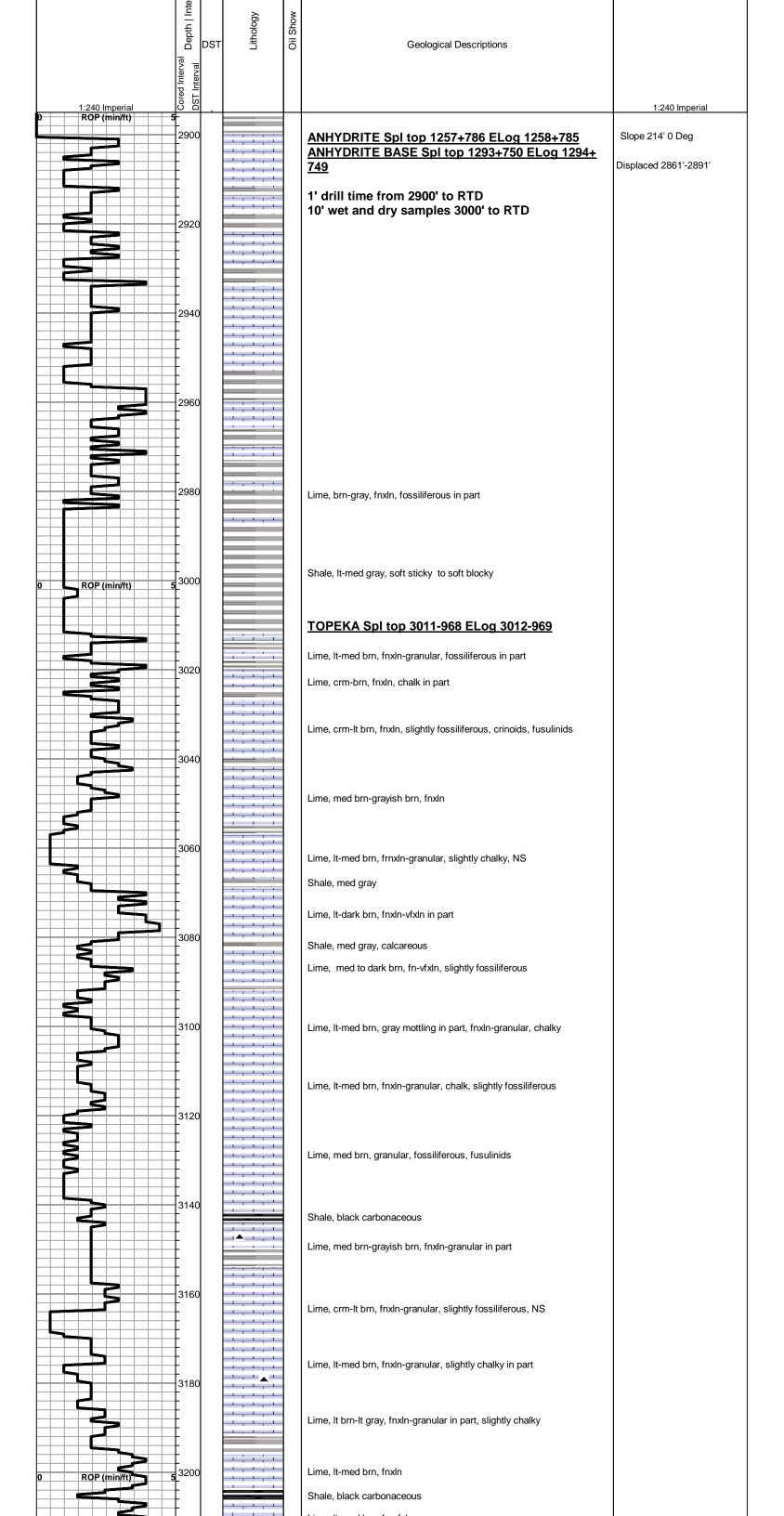


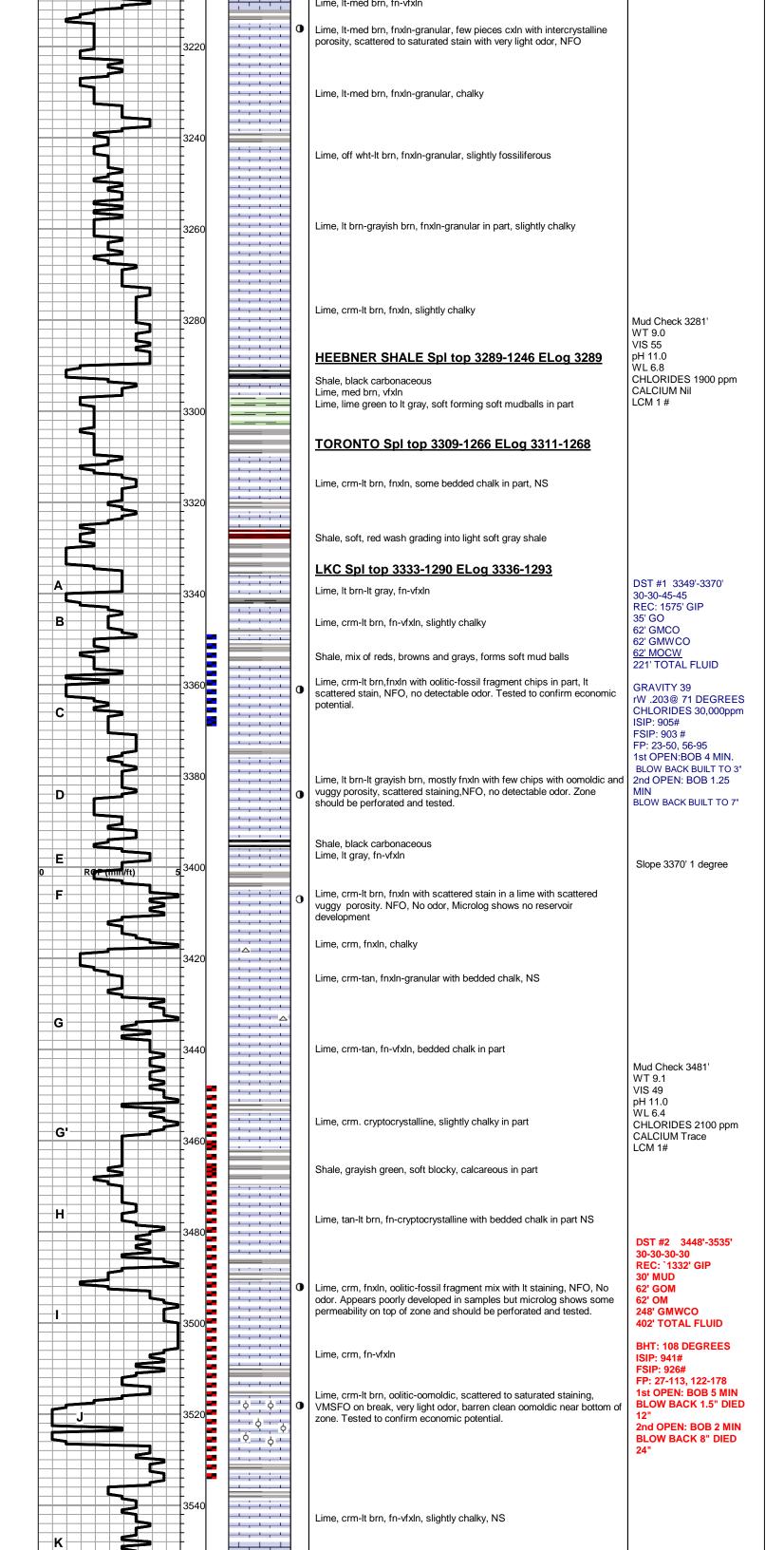


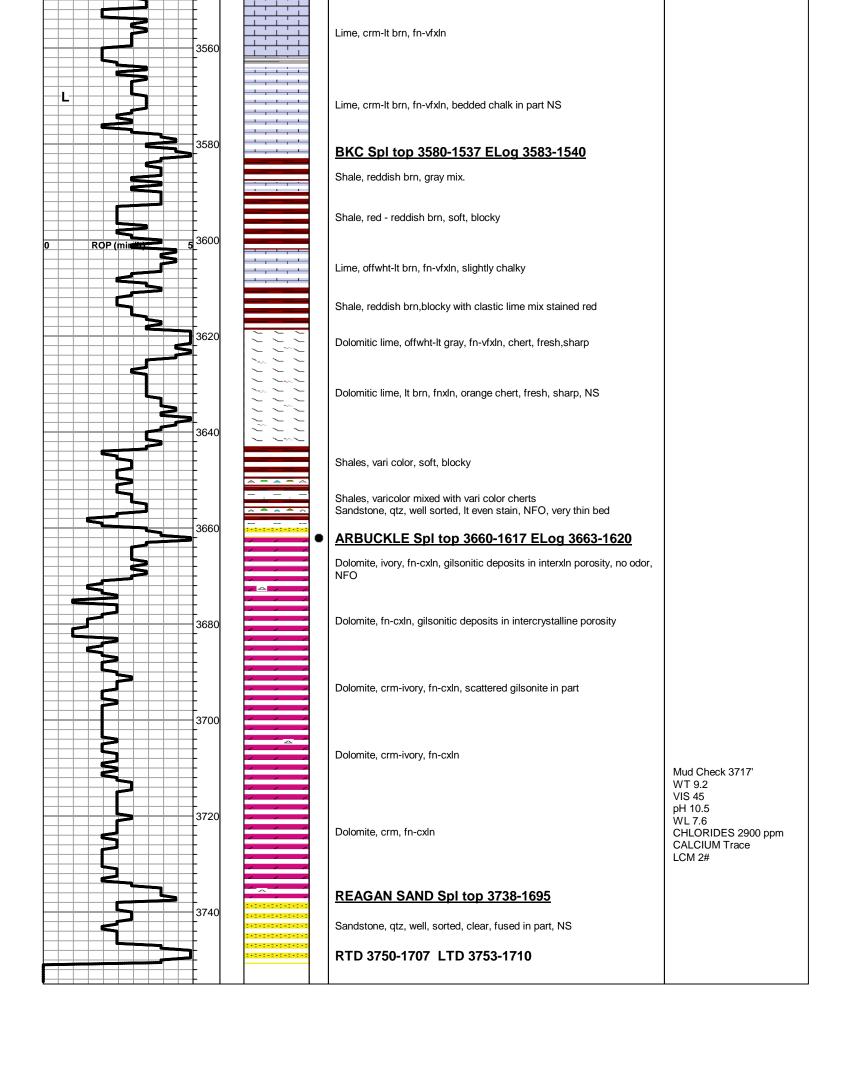


	OTHER SYMBOLS	
DST DST Int DST alt		

Printed by GEOstrip VC Striplog version 4.0.7.0 (www.grsi.ca									
Curve Track #1						Curve Track #3			
ROP (min/ft)									
	als								







QUALITY OILWELL CEMENTING, INC.

GEROLOGIA PERCHO EMB CHARANTANE

Federal Tax I.D.# 20-2886107

Phone 785-483-2025 Cell 785-324-1041 Home Office P.O. Box 32 Russell, KS 67665

No. 345

State On Location Finish County Range Sec. Twp. Date _ < Well No. southwind #1 Owner To Quality Oilwell Cementing, Inc. Type Job You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed. T.D. Charge To Depth Street Tbg. Size Depth State City Tool The above was done to satisfaction and supervision of owner agent or contractor. Shoe Joint Cement Left in Csg. 15 Cement Amount Ordered Displace Meas Line EQUIPMENT Cementer (Common Pumptrk Helper Driver Poz. Mix Bulktrk Driver Driver Gel. Bulktrk Driver **JOB SERVICES & REMARKS** Calcium Hulls Remarks: Salt Rat Hole Flowseal Mouse Hole Kol-Seal Centralizers Mud CLR 48 Baskets D/V or Port Collar CFL-117 or CD110 CAF 38 Sand Handling Mileage FLOAT EQUIPMENT Guide Shoe Centralizer Baskets AFU Inserts Float Shoe Latch Down Pumptrk Charge S Mileage Discount Total Charge

SWIFT Services, Inc. JOB LOG JOB TYPE 2-STAGE LEASE WILLIE WELL NO. CUSTOMER PRESSURE (PSI)
TUBING CASING VOLUME BBLYGAL RATE (BPM) CHART NO. DESCRIPTION OF OPERATION AND MATERIALS ONLOCATION 2030 CMT; BOTTON 17550 EA2 TUP 175 SW SMD RYD375D, SETPIPE 3718, SJ 4235, ZESM 3706 5/214th D.V. DNTOP 59, 12500 CENT 1,3,5,7,9,11,13,58, BASIET 2.12,59, 81 OUT 61,82.85 START CSLAFIDATERY 2150 TALIBOTTEM DOSPBALL BRESNEINCE & DOISTEPIPE 23/5 500CA MUDFUSH 200 0000 12 515 20 bbi. Wa Flush 00 17556 EA2 42.5 DEPLOPUE, WASHUUTPL START DISS YAZ 6.0 200 600 75 85 -LAND PLUG 0030 4.5 90.4 REISES DRY, DROF DN. OFEN ING JAKY PLUC RH30, MH15 7.5 Open D.Vo WIME 0045 5,0 5 START SMO CMT 130565 75 DOD DV. assing Plug START DISP CIRCOMT 2054S 200 5.0 500 30,5 LAND & CLOSE DU 0115 JOB COMPLETE 0000 THANKOV!

DAVE JOSAB, TJ